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ABSTRACT

A special library can evaluate its collection using two evaluation methods first introduced by academic research libraries. This evaluation was concerned with the monograph and serial collections of a corporate library. The lack of methods for evaluating special libraries has been well documented in library literature. The data necessary for this project were collected daily in a corporate library. Only one library was evaluated, since special libraries differ so greatly and methods applicable in one will not necessarily be useful in another. The two methods used were R. P. Coale's evaluation of the Newberry Library and G. D. Byrd's analysis of interlibrary loans. An analysis of interlibrary loans was chosen since the library studied encourages use of its interlibrary loan service by its patrons. The research department supported by the library publishes papers that could be analyzed to determine if the research required to write them could have been done in that library. Papers written in other institutions were also analyzed to determine if the research needed to write them could have been done in the same library. Both methods proved successful and showed that the library had a very strong serials collection. (35 references) (DB)

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EVALUATING THE STRENGTHS AND LIMITATIONS OF A CORPORATE LIBRARY COLLECTION

A Master's Research Paper submitted to the
Kent State University School of Library Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Lucia K. Green

May, 1991

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ABSTRACT

A special library can evaluate its collection using two evaluation methods first used by academic research libraries. The evaluation is concerned with the monograph and serial collections of a corporate library. The lack of methods for evaluating special libraries has been well documented in library literature. The data necessary for this project were collected daily while working in a corporate library. Only one library was evaluated, since special libraries differ so greatly that methods applicable in one will not necessarily be useful in another. The two methods used are R. P. Coale's evaluation of the Newberry Library and G.D. Byrd's analysis of interlibrary loans. An analysis of interlibrary loans was chosen since the library studied encourages use of its interlibrary loan service by patrons. The research department supported by the library publishes papers that could be analyzed to determine if the research required to write them could have been done in the library. Papers written in other institutions were also analyzed to see if the research needed to write them could have been done in the same library. Both methods proved successful and showed that the library had a very strong serials collection.

INTRODUCTION

This study is an evaluation of the book collection of a corporate library using two evaluation methods discussed in library journals. These methods, previously used to evaluate large academic research libraries, will now be applied to a small corporate research library. The purpose of the study is to explore ways to judge how well the monograph and serial collection meets the needs of its users. The evaluation should provide reports to management on the library's usefulness and provide the librarian with information to aid in planning the future of the library.

It is necessary to evaluate the services libraries provide. Non-profit and service organizations such as libraries, often perceived as "good" by the community, are now under increasing pressure to prove that they really do "good" and to justify their existence.[1]

Corporate libraries, which are usually cost centers rather than profit centers for their institutions, must now justify a need to continue their existence in a climate of corporate cost-cutting.[2] Because there is no need for accreditation or

[1] Philip D. Harvey and James D. Snyder, "Charities Need a Bottom Line, Too," Harvard Business Review 65 (January-February 1987): 14.

[2] Robert V. Williams, "Productivity Measures in Special Libraries: Prospects and Problems for Use in Performance Evaluation," Special Libraries 79 (Spring 1988): 101

certification in corporate libraries, there is less pressure to find a valid way to evaluate them.[3] Lancaster points out that evaluation is not an end in itself, but a management tool to allow administration to judge what the library is doing and if that is what it should be doing.[4]

There is general agreement that all libraries should evaluate their services. Orr states that it is necessary to judge the effectiveness and benefit or quality and value of the library. The ultimate judges of the library's value are those who pay the costs. He feels that part of the difficulty in getting adequate support is that the measures of quality and value that are used by librarians have little validity for non-librarians.[5]

Drucker points out that public service organizations are criticized for being unbusinesslike. This usually means that the public service organization should focus on costs. Yet, what characterizes a business is a focus on results.[6] Results in many service organizations are intangible. There are ways to

[3] James Beaupre' Dodd, "Gap in Standards for Special Libraries," Library Trends 31 (Summer 1982): 86.

[4] F.W. Lancaster with the assistance of M.J. Joncich, The Measurement and Evaluation of Library Services, (Arlington, VA: Information Resources Press, 1977), 17.

[5] R. H. Orr, "Measuring the Goodness of Library Services: A General Framework for Considering Quantitative Measures," Journal of Documentation 29 (September 1973): 327.

[6] Peter F. Drucker, "Managing the Public Service Institution," Public Interest 33 (Fall 1973): 46.

measure intangible goals. The telephone company said its business was service, and measured the amount of time a customer had to wait for an operator or installation. This focused the managers' attention on results.

In his study of 5 corporate libraries that closed, James M. Matarazzo found that none of the librarians evaluated the library services in a meaningful way. User praise and salary increases were used in place of formal evaluation. When the decision came to close these corporate libraries, corporate management, in all cases, felt the library had declined in importance to the company, and that needed information could be obtained from outside sources.[7] Since none of these libraries used any type of evaluation, in complete disregard of the Special Library Association's Objectives and Standards[8], the librarians were often unprepared for the decision to close the library and could not make a persuasive argument against it.

The Objectives and Standards for Special Libraries states that "The subject coverage of the special library's collection is intensive and extensive enough to meet the current and anticipated information requirements of the library's

[7] James M. Matarazzo, Closing the Corporate Library: Case Studies on the Decision-Making Process, (New York: Special Libraries Association, 1981), 130-131.

[8] Objectives and Standards for Special Libraries, (New York, Special Libraries: 1964), 675.

clientele"[9] and that "the administrator continually evaluates the scope and adequacy of the collection in the light of changes in emphasis or new developments in the organization's activities."[10] Lancaster states that without an effective evaluation, the library can not grow and adapt to changing conditions.[11]

Knightly did a study to identify the extent to which library performance criteria proposed in the literature were actually used. One of his criteria was expert opinion. In the libraries where this was used, the opinion of an outside expert was not utilized. The expert opinion was the library manager's opinion of how well a procedure was working. The most used criteria were tallies of circulation, reference questions, attendance figures and publications.[12] These are not really useful statistics. One objective of this study is to identify ways to compile statistics that will allow the librarian to make managerial decisions.

[9] Ibid.

[10] Ibid.

[11] F.W. Lancaster, If You Want to Evaluate Your Library..., (Champaign, IL. : University of Illinois, 1988), 12-13.

[12] John J. Knightly, "Overcoming the Criterion Problem in the Evaluation of Library Performance," Special Libraries 70 (April 1979): 175-176.

LITERATURE REVIEW

A search of Library Literature and Library and Information Science Abstracts for the past seven years was made to find current articles and books on library evaluation, as applied to special libraries. The Special Library Association, in Washington, D.C., provided a bibliography on evaluation in special libraries. Citations in these articles and books led to other literature. Much was found on the need for evaluation of special libraries, but very little was found on how to evaluate a special library.

There is very little practical information of the "how to do it" variety on evaluating libraries. F.W. Lancaster's If You Want to Evaluate Your Library ... is probably the best overview of studies done on evaluating libraries. The Association of Research Libraries has published Objective Performance Measures for Academic and Research Libraries by Paul B. Kantor. This workbook contains technical details, worksheets and procedural tips. It is meant for internal analysis and deals with the library's capacity to satisfy present users' needs by analyzing actual users' requests. This is also a very good, practical workbook. For anyone who does not want to discover new ways to evaluate a library but, instead, put already discovered ways to good use, these are the most practical books to use.

Paula Strain gives practical advice on compiling statistical records that aid in evaluating a library's operation. She feels three years of statistics are needed before trends can be seen and the statistics can begin to be useful. For statistics to be of any use, they must continue to be compiled and evaluated.[13]

The self-evaluation guide published by the Society of American Archivists, is a guide that could be used by any special library. It is an evaluation of organization and goals, however, and not for evaluating the collection.

[13] Paula M. Strain, "Evaluation by the Numbers," Special Libraries 73 (July 1982): 171-172.

METHODOLOGY

A special library has been defined as an organization "maintained by a parent organization to serve a specialized clientele...intended to serve the research and informational needs of employees or affiliates of the organization"[14] and "a collection of books ... dealing with a limited field of knowledge".[15] For purposes of this project, the special library has been defined as a library or information center specializing in a narrow subject field, serving the needs of a corporation and not open to the public. The American Library Association's Data Collection Handbook states that the basic resource of the library is the collection.[16] Most measurement and evaluation of library collections has been of physical dimensions. This study attempts to evaluate the usefulness of the collection for the library user. Since it is assumed that the evaluation procedures will not be a one

[14] Library Data Collection Handbook, ed. Mary Jo Lynch and Helen M. Eckard, (Chicago: American Library Association, 1981), 7.

[15] Harrod's Librarians' Glossary of Terms Used in Librarianship Documentation and the Book Crafts and Reference Book. Revised and updated by Ray Prytherch, Advisory editor Leonard Montague Harrod, (Aldershot Hants: Gower Publishing Co., 1984) s.v. Special Libraries.

[16] Data Collection Handbook, 23.

time effort but will, instead, be a benchmark[17] against which subsequent studies will be compared, the methods used concentrate on the use of statistics that the library can compile while providing information services. As much as possible, this project tried to use evaluation methods that followed the Handbook's suggestion that "data collection should be provided as a by-product of the library's activity."[18] The statistics will provide more than a quantifiable measure, such as circulation totals, but as suggested by Knightly, a qualifiable measure.[19]

The specific library used in this study is the research library of the Federal Reserve Bank of Cleveland. The library is open to anyone working in the corporation, but its mission is to support the administration and the research department of the bank. The method of charging material out to borrowers is very informal. As a result, there is no way to analyze circulation statistics. From 1918, when the library was founded, until 1980, when the library joined OCLC, cataloging was loosely based on the Library of Congress classification, but can be considered unique to this library. This eliminates many other possible methods of evaluating the library. The

[17] Frances Gaither Tucker, Seymour M. Zivan and Robert C. Camp, "How to Measure Yourself Against the Best." Harvard Business Review 65 (January-February 1987): 8.

[18] Data Collection Handbook, 96.

[19] Knightly, "Overcoming the Criterion Problem," 177.

library uses the OCLC interlibrary loan network and publishes a new acquisitions list every two weeks. The research personnel produce working papers in the fields they are studying throughout the year. There are two classic studies that can be duplicated in this library by using the interlibrary loan records, the acquisitions lists, and the working papers produced by the research department. These are Gary Byrd, D. Thomas, and Katherine Hughes' evaluation of a medical library collection,[20] using interlibrary loan borrowing and acquisitions, and Robert Coale's study of the Newberry collection.[21]

[20] Gary D. Byrd, D. A. Thomas and Katherine E. Hughes, "Collection Development Using Interlibrary Loan Borrowing and Acquisitions Statistics," Bulletin of the Medical Library Association 70 (January 1982): 2.

[21] Robert Peerling Coale, "Evaluation of a Research Library Collection: Latin-American Colonial History at the Newberry," Library Quarterly 35 (July 1965): 174.

ANALYSIS OF INTERLIBRARY LOAN

G.D. Byrd used interlibrary loan records and acquisition statistics to find weaknesses in a collection. He theorized that if the volume of material borrowed exceeds the volume of material bought in a specific classification area, this is the area where the collection is weakest.

The simple mathematical formula used for analysis is:

$$C.B. = 100 \times \left(\frac{\text{New acquisitions in this class}}{\text{Total acquisitions}} - \frac{\text{Titles borrowed in this class}}{\text{Total borrowed}} \right)$$

If C.B. or the Collection Balance is a positive value, this indicates a subject area relatively strong in terms of current acquisitions, while a negative value indicates a relatively weak subject area.[22]

Interlibrary loan borrowing and book acquisitions for six months were compiled and sorted to illustrate strengths and weaknesses in subject holdings. The Federal Reserve library resembles the health services libraries in the original study, since the collection is limited and everyone is encouraged to use the interlibrary loan services. Comparing interlibrary loans with acquisitions should show if there are any subject areas in demand, for which material is not being

[22] Byrd, "Collection Development," 7.

bought. The original study compared only books and did not consider journals and, although the interlibrary loan records did keep track of journal article requests, journal articles were not used in the collection balance statistics.

After several false starts, it was found that the most convenient record keeping method was to enter the interlibrary loan requests each day on a spreadsheet program using the OCLC database number to identify the book or periodical. Because the date of publication was always on the interlibrary loan request, this was also entered. Later, it was easy to pull up the Library of Congress classification number and note down whether the request was for a book or serial, if this had not been recorded originally.

While records were kept for six months, these were not consecutive months. Records were kept from November 1989 to February 1990 and April through May 1990. Sudden and unexpected staffing changes in the spring made it impossible to keep records for March. Two staff members, out of a total of five, unexpectedly resigned. It was not felt that the break in record keeping had any real significance for this study. There was nothing unusual about the interlibrary loans or acquisitions during this month. There is nothing cyclical or seasonal about work in the library. This period did cover a major holiday season and the start of a new year. This six months should give an indication of the interlibrary loan and acquisition activity for the year. Incidents, such as the one

related here, can be very disruptive for a special library. Keeping records can be more time consuming than generally acknowledged. It should not be an excuse for abandoning any attempt to compile statistics.

The following graphs and charts show the results of the study. Each starred column in Table 1 represents an acquisition list issued between November 1989 and July 1990. The chart gives the classification area for each new monograph. Working papers are classified under the issuing body. For example, all working papers issued by the National Bureau of Economic Research are classified under the classification number HC instead of being classified by subject. As a result they were eliminated from consideration and are not represented in Tables 1 or 3. Subject classification areas that generated no interlibrary loans are not represented in Table 3.

TABLE 1. ACQUISITIONS FROM NOVEMBER 1989 TO JULY 1990

CALL NOS.	ACQUISITION LISTS															TOTAL	% OF TOTAL
	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
DS	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.38%
E	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.38%
FC	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.38%
H	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	3	1.15%
HA	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.38%
HB	4	1	4	5	2	0	2	0	3	4	0	2	3	3	1	34	12.98%
HC	1	0	0	2	3	0	1	5	2	3	2	4	2	4	3	32	12.21%
HD	2	1	2	2	0	1	0	4	4	3	1	3	3	1	1	28	10.69%
HF	1	2	2	0	0	2	1	1	1	1	1	1	4	0	2	19	7.25%
HG	8	9	8	8	7	11	11	5	7	4	5	3	5	5	9	105	40.08%
HJ	0	2	1	3	2	0	2	3	2	1	1	1	0	1	1	20	7.63%
HN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.38%
HV	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0.76%
JK	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.38%
JS	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2	0.76%
KF	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	4	1.53%
LB	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.38%
Q	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.38%
QA	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	1.15%
TD	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.38%
UA	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.38%

TOTAL # OF BOOKS ACQUIRED IN THIS PERIOD 262

TABLE 2. CLASSIFICATION BREAKDOWN OF INTERLIBRARY LOANS

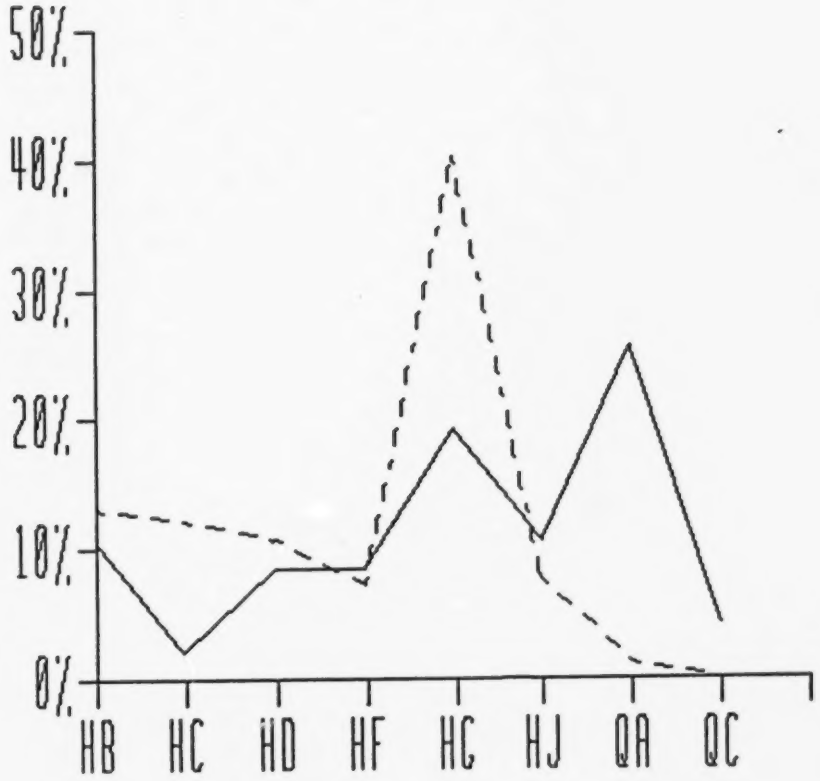
CALL NUMBER	# OF LOANS	% OF TOTAL
DD	1	1.12%
E	1	1.12%
G	1	1.12%
H	1	1.12%
HA	1	1.12%
HB	12	13.48%
HC	8	8.99%
HD	6	6.74%
HE	6	6.74%
HF	5	5.62%
HG	16	17.98%
HJ	7	7.87%
JA	1	1.12%
JS	1	1.12%
KD	1	1.12%
QA	15	16.85%
QC	1	1.12%
QH	1	1.12%
S	1	1.12%
TD	1	1.12%
Z	2	2.25%

TABLE 3. COLLECTION BALANCE

ACQUISITIONS		ILL BOOKS		COLLECTION BALANCE	
DS	0.38%	DD	2.13%	-1.75%	General History
E	0.38%	E	2.13%	-1.75%	American History
HA	0.38%	HA	2.13%	-1.75%	Statistics
HB	12.98%	HB	10.64%	2.34%	Economic Theory
HC	12.21%	HC	2.13%	10.09%	Economic History
HD	10.69%	HD	8.51%	2.18%	Economic History
HF	7.25%	HF	8.51%	-1.26%	Commerce
HG	40.08%	HG	19.15%	20.93%	Finance
HJ	7.63%	HJ	10.64%	-3.00%	Public Finance
KF	1.53%	KD	2.13%	-0.60%	Law
QA	1.15%	QA	25.53%	-24.39%	Mathematics
QC	0.00%	QC	2.13%	-2.13%	Physics
Z	0.00%	Z	4.26%	-4.26%	Library Science

Table 4

COLLECTION BALANCE



Broken Line = Acquisitions

Solid Line = Interlibrary Loans

Because of the small number of interlibrary loans, a collection balance of less than 5% is not significant. Therefore, the most significant number is the -24% in the QA classification area for Mathematics. The collection balance suggests that not enough books are being bought in Mathematics. At this point it is a question of policy whether or not the library wants to expand its holdings in this field. It does appear there is an unmet demand.

The largest area of positive collection balance is the +20% in HG, representing Finance. This subject area classification comprises the majority of books in the collection and is the area of emphasis. It is not surprising that the most books are bought in this area. Even though the interlibrary loans in this classification area are 40% of the total interlibrary loans, the collection balance is positive in this area.

The majority of the interlibrary loan requests from the Cleveland Research Library, 56.32%, are for books. Because the library has no approval plan, the only way a book can be evaluated before buying is to get a copy on interlibrary loan. 43.68% of the interlibrary loan requests originating at the Cleveland Research Library are for journal articles. Of the total interlibrary loans processed at this library, 59.15% of all the interlibrary loans were requests from other libraries. 40.85% of the total loans originated at the Cleveland Library. Although special libraries have been accused of only generating interlibrary loan requests and never filling them, this is not

accurate in this case.

Just before this study was started, all the library's holdings were put in the OCLC database. Before this, the only holdings in the OCLC database were monographs cataloged after 1980. As a result, there were very few interlibrary loan requests for serials, and other libraries had no way of knowing what monographs published before 1980 were in our holdings. By counting the number of interlibrary loan requests from other libraries for serials and those monographs published before 1980, it can be assumed interlibrary loans increased by 47% when the library's holdings went online.

COALE CITATION COLLECTION RATIO

R.P. Coale did an evaluation of the Newberry Library by checking the citations and bibliographies of several well-known and scholarly books on South American history against the holdings of the Newberry Library.[23] He was able to show that the books could have been written using the Newberry collection and also to pinpoint areas in the Newberry collection that needed to be improved.

A study utilizing these methods was possible at the Federal Reserve Bank of Cleveland. The economists at the bank do research in current economic conditions. This research is published in a series of working papers. The bibliographies of the working papers published by the Federal Reserve Bank of Cleveland could be checked against the catalog in the library to see if the economists could do their research in the library or had to depend heavily on interlibrary loan or other libraries. The Cleveland Federal Reserve is directly across the street from the Cleveland Public Library, which is one of the largest public research libraries in the country. Many of the economists in the research department have faculty status at local colleges and universities. It would not be too difficult for research projects to be done at other libraries. Visiting scholars also come to the Federal Reserve for periods

[23] Coale, "Evaluation of a Research Library Collection," 174.

of up to a year, during which they publish papers. This study should show if those papers were based on research that could have been done at the Federal Reserve's library.

However, evaluations on the basis of publications produced at the institution being evaluated are considered of doubtful validity.[24] It is generally agreed that this produces a bias toward the institutional library. Instead, bibliographic references from publications produced at a similar institution should be used.[25] Many special libraries could argue that there are no other libraries with exactly their mission and no publications that reflect the research their library supports.

The Federal Reserve Bank in Cleveland is one of a system of twelve banks in the United States, along with the governing board in Washington, with its own research department and library. In order to analyze the library of the Federal Reserve Bank of Cleveland, research papers done at other Federal Reserve Banks could be used to evaluate the collection. Working papers from the Federal Reserve Banks of Richmond, Minneapolis, and the Board of Governors, in Washington, D.C. were chosen on the basis of evaluations made by Dennis W. Jansen in his paper ranking the research departments of the Federal Reserve

[24] Lancaster, If you want to evaluate..., 28.

[25] Ibid.

System by their publications.[26] On the basis of his paper, bibliographies from the working papers of the Federal Reserve Bank of Atlanta and Minneapolis, as well as the Federal Reserve Board, were checked against the holdings of the Cleveland Federal Reserve Bank's library.

Current publications were used since currency is very important in this research. The officers of the Federal Reserve System make decisions that affect the monetary policy of the United States. The economists do the research that helps them make these decisions. Changes in administration in Washington or Cleveland may change the direction of research. Certainly, events such as a drought in the Midwest or the war in the Gulf will bring demands for research into these events. World events, such as the fall of the Shah of Iran or the legal and administrative changes of Ronald Reagan's domestic policies can make research done five or ten years ago irrelevant.

Special libraries are evaluated not on how they compare to other libraries, but on how well they do what the organization that supports them expects them to do. By checking bibliographies of working papers produced in our economic department and the economic departments of other federal reserve banks, it would be possible to evaluate how well the library supported the research being done there as well as the research

[26] Dennis W. Jansen, Ranking Federal Reserve System Research Departments by Publications in Professional Journals, Working paper 89-17 (Texas A&M, Department of Economics: College Station, Texas, August 1989), 11-15.

the library might be called upon to do in the future.

It was felt that working papers would give access to the work of the largest possible number of economists. In order not to preselect papers that would give a favorable outcome, the attempt was made to analyze all the papers published by a bank for a year. At both the Board of Governors and the Federal Reserve Bank of Minneapolis there were authors publishing chapters of their doctoral dissertations as separate working papers. When this was noticed, an attempt was made not to get more than one paper from each dissertation so that the results would not reflect the research of one person.

Everything in the bibliographies was listed and checked against the catalog. The citations were keyed into a Lotus program, to manipulate the data and do the mathematical computations. All the working papers produced by the Cleveland Federal Reserve Bank for 1988 and 1989 were used. The working papers from the Federal Reserve Bank of Atlanta for 1989 were used. In 1988 the Federal Reserve Bank of Minneapolis started the Institute for Empirical Macroeconomics as a joint venture with the University of Minnesota. Some of the research was funded by federal grants. It is these papers, published irregularly, that were used in this study.

A list of the working papers, the number of citations, and the percentage found in the library can be found in the appendix. There are 797 total references cited in the Federal Reserve Bank of Cleveland's working papers for 1988 and 1989. Of

these, a total of 624 references, or 78%, were found in the library. When the citations were divided up between serials and monographs, 50% of the monographs cited were found in the Cleveland Library and 94% of the serials cited were found.

When the citations of working papers from other research departments were analyzed, there were 767 total references. 73% were found in the catalog of the Federal Reserve Bank of Cleveland. In a breakdown of the citations, 95% of the serials cited were found.

These figures agree with the figures in the study of interlibrary loans. The Cleveland Federal Reserve Bank library has a very strong journal collection. The book collection is not as strong. The 73% and 78% of total references found is low due to the lack of monographs found.

Since the purpose of this project was to identify those areas of the collection that were weak, a closer look was taken at those papers in which less than 50% of the citations were found in the library. The three working papers published by the Cleveland Federal Reserve Bank that fell into this category deal with hospital administration and salary, industrial pollution or environmental concerns, and the economics of the infrastructure in urban transportation. Any reading of general news journals such as the New York Times or Newsweek gives examples of general concern about health care costs and the environment. These deal with the intangibles of the quality of life, and are part of the interdisciplinary areas of

finance and economics. The only working paper in the Atlanta series that had under 50% of its citations found was #89-5. Most of the monographs cited fell into the QA classification. This was also true of Minneapolis' discussion paper #34. This is the classification area in which the interlibrary loan analysis showed a weakness in the collection. Many of the monographs that could not be found were unpublished papers, or papers published by university graduate departments of finance and economics. Of the papers with a less than 50% found rate, the number of unpublished monographs cited was 25%. The total number of unpublished monographs cited in all the papers analyzed was 15% of the total.

Coale has pointed out that a "good" collection may be "a poor place for a scholar to work if many necessary titles tangential to his subject are lacking."[27] Primary sources and titles related to the subject being discussed are necessary.[28] This study points up the need for the Cleveland Federal Reserve library to make available lists of publications produced at universities and government agencies and some form of cataloging for the ones that are acquired. Some of the papers that were historical studies pointed up that the Cleveland library did not have

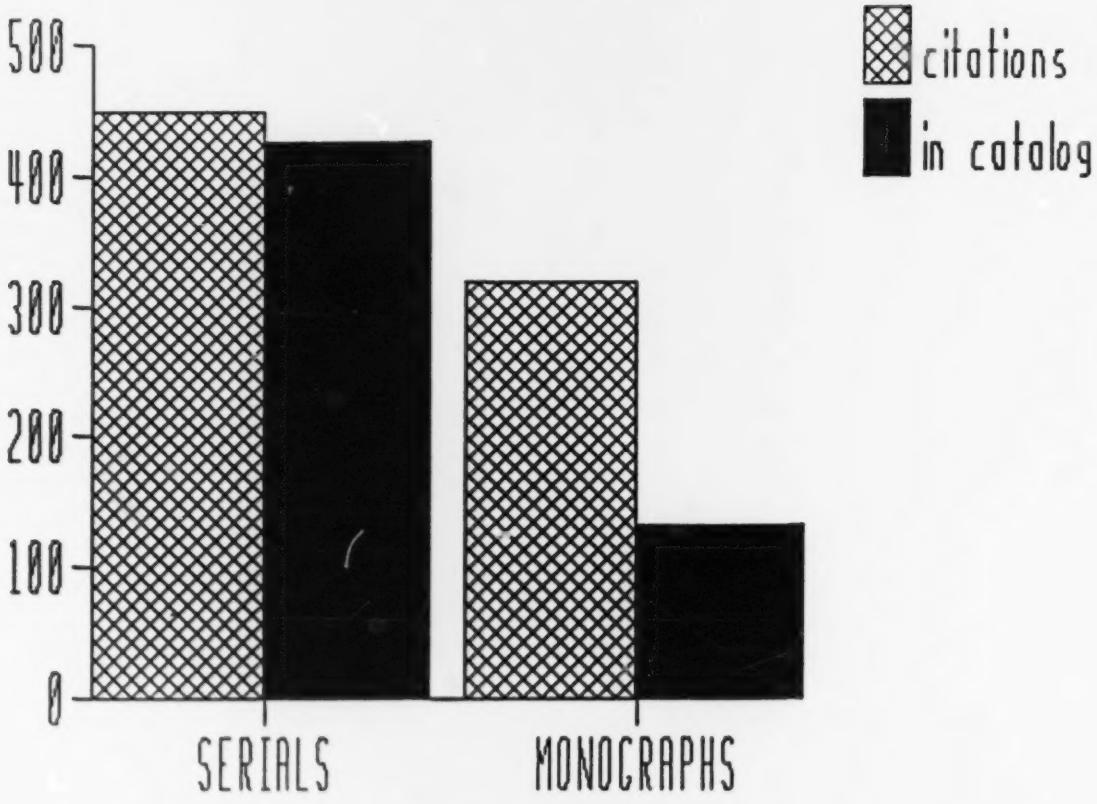
[27] Coale, 174

[28] F.W. Lancaster, Measurement and Evaluation of Library Services (Washington D.C.: Information Resources Press, 1977), 176.

works by many of the influential economic thinkers who have shaped economic theory. The library should be more aggressive in acquiring monographs for possible future research. More acquisitions of books in the QA classification area are needed. Two different evaluation methods have indicated this is a weakness in the collection.

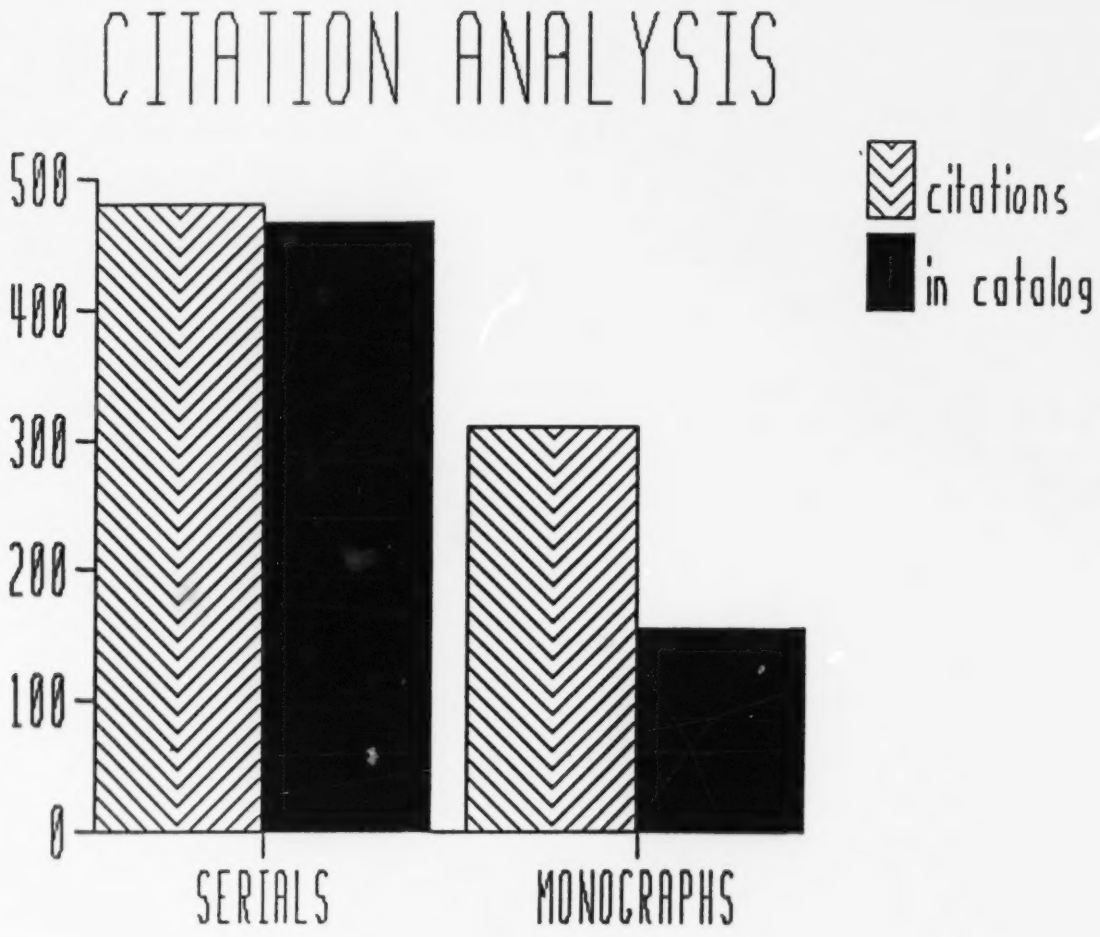
Table 5

CITATION ANALYSIS



Outside Working Papers

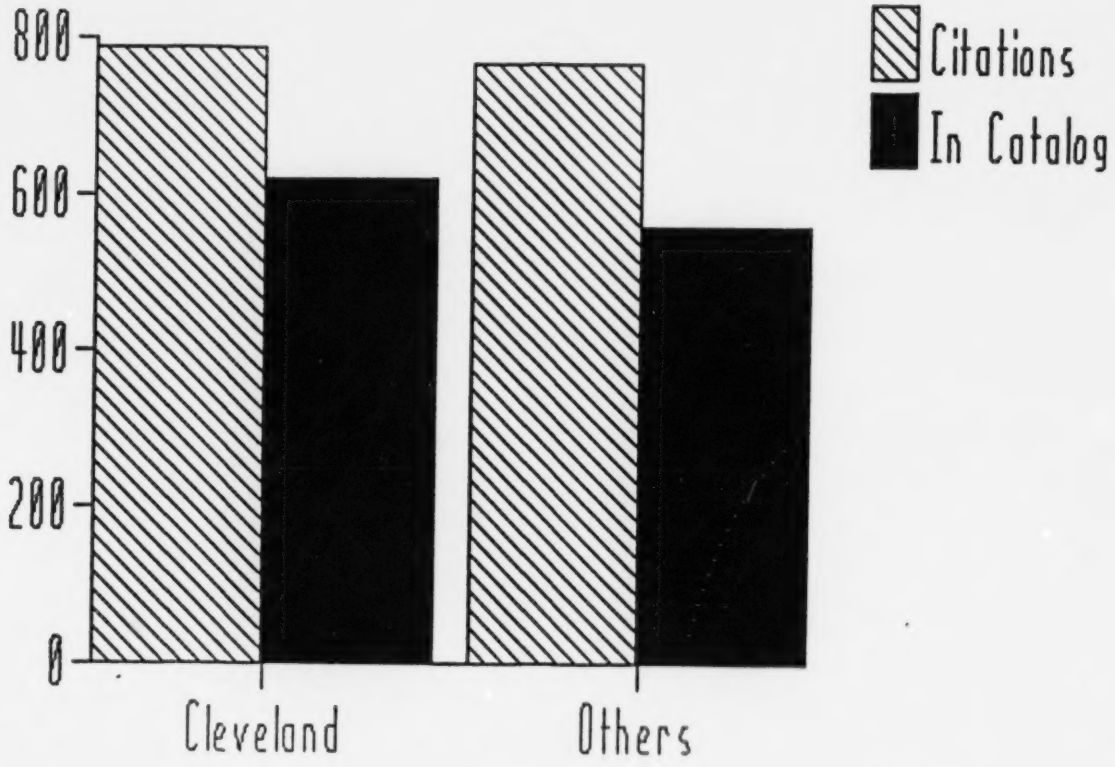
Table 6



Cleveland Working Papers

Table 7

TOTAL CITATION ANALYSIS



Total publications

CONCLUSION

This research project discovered strengths and weaknesses in a research library collection using evaluation methods first used in academic libraries. In terms of evaluating this library, they could be considered successful. By using two different methods of evaluating the collection, it was possible to obtain conclusive results. Both methods show a strong journal collection and a weaker monograph collection. There is much use of unpublished material. This suggests a need for better bibliographic control of this material.

Use of these methods could provide material for reports to management, in addition to providing statistics upon which managerial decisions in the library may be based. The use of a spreadsheet program to manipulate data and do the mathematical computations simplify much of the work involved.

Because of the special characteristics of the Cleveland Federal Reserve Bank library, the use of these evaluation techniques in other libraries may not produce similar, satisfactory results. This study shows, however, that special libraries can find methods for internal evaluation.

APPENDIX

WORKING PAPERS WITH TOTAL OF CITATIONS FOUND IN LIBRARY

FEDERAL RESERVE BANK OF CLEVELAND WORKING PAPERS

Altig, David and Steve J. Davis. Altruism, Borrowing Constraints and Social Security. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8918. 88% found in library.

_____. The Timing of Intergenerational Transfers, Tax Policy and Aggregate Savings. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8917. 92% found in library.

Bauer, Paul W. Decomposing TFP Growth in the Presence of Cost Inefficiency, Nonconstant Returns to Scale and Technological Progress. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8813. 92% found in library.

_____. TFP Growth, Change in Efficiency, and Technological Progress in the U.S. Airline Industry. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8804. 77% found in library.

Beeson, Patricia E. and Randall W. Eberts. Interurban Comparisons of the Quality of Life. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8809. 60% found in library.

Carlstrom, Charles T. and Edward N. Gamber. Money, Inflation, and Sectoral Shifts. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8814. 94% found in library.

_____. A Two-Sector Implicit Contracting Model With Procyclical Quits and Involuntary Layoffs. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8902. 83% found in library.

Chou, Nan-Ting and Raymond P. DeGennaro. Regime Changes in Stock Returns. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8915. 86% found in library.

Cromwell, Brian A. Dedicated Taxes and Rent Capture by Public Employees. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8904. 88% found in library.

_____. Federal Grant Policies and Public Sector Scrappage Decisions. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8811. 33% found in library.

The infrastructure of urban transportation may become a critical economic problem in the future. The low percentage of citations may pinpoint a new area for acquisitions.

---. Impact of Capital Grants on Maintenance in the Local Public Sector. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8812. 72% found in library.

Demirguc-Kunt, Asli. Modeling Large Commercial-Bank Failures. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper # 8905. 76% found in library.

--- and Hashem Dezhbaksh. Testing for Speculative Bubbles in Stock Prices. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8807. 76% found in library.

--- and James B. Thomson. Using SMVAM as a Linear Approximation to a Nonlinear Function. Cleveland, OH: Federal Reserve Bank, 1988. Working paper #8810. 83% found in library.

--- and Dennis W. Jansen. Factor-Adjustment Costs at the Industry Level. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8911. 73% found in library.

_____ and Wayne B. Gray. Enforcement of Pollution Regulations in a Declining Industry. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8912. 44% found in library.

The authors of this paper were visiting scholars at the Federal Reserve Bank. The subject matter was industrial pollution and government regulation and the environment. This is interdisciplinary subject matter and less than half the citations were available.

_____. Impact of Firm Characteristics on Plant Closing Decisions. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8803. 67% found in library.

Duffy-Deno, Kevin T. and Randall W. Eberts. Public Infrastructure and Regional Economic Development. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8909. 77% found in library.

Eberts, Randall W. and Timothy J. Gronberg. Structure, Conduct, and Performance in the Local Public Sector. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8910. 77% found in library.

Gavin, William T. and William G. Dewald. The Effects of Disinflationary Policies on Monetary Velocity. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8901. 88% found in library.

Gorshen, Erica L. Do Wage Differences Among Employers Last? Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8906. 70% found in library.

_____. Sources of Wage Dispersion. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8802. 66% found in library.

_____. and Alan B. Krueger. Structure of Supervision and Pay in Hospitals. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8907. 47% found in library.

100% of the journals cited were found in the library but the monographs on human resources and industrial relations were not in the collection.

Kowalewski, K.J. Bankruptcy in the Life-Cycle Consumption Model. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8815. 85% found in library.

Osterberg, William P. and James B. Thomson. Capital Requirements and Optimal Bank Portfolios. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8806. 100% found in library.

_____. Financial Structure and the Adjustment of Capital Stock. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8808. 88% found in library.

_____. Intervention and the Risk Premium in Foreign Exchange Rates. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8908. 79% found in library.

_____. Tobin's q, Investment, and the Endogenous Adjustment of Financial Structure. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8801. 86% found in library.

Samolyk, Katherine A. Portfolio Risks and Bank Asset Choice. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8913. 92% found in library.

_____. The Role of Banks in Influencing Regional Flows of Funds. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8914. 81% found in library.

Stevens, E.J. Pricing Daylight Overdrafts. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8816. 60% found in library.

Thomson, James B. An Analysis of Bank Failures: 1984-1989. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8916. 93% found in library.

Todd, Walker F. Lessons of the Past and Prospects for the Future in Lender of Last Resort Theory. Cleveland, OH: Federal Reserve Bank, 1989. Working paper #8805. 100% found in library.

Whalen, Gary. Predicting De Novo Branch Entry into Rural Markets. Cleveland, Ohio: Federal Reserve Bank, 1989. Working Paper #8903. 100% found in library.

WORKING PAPERS IN ECONOMICS FROM OTHER FEDERAL RESERVE BANKS

FEDERAL RESERVE BANK OF ATLANTA

Ackert, Lucy F. Tests of a Simple Optimizing Model of Daily... Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-10. 58% found.

The subject heading assigned to this paper was 'mathematical models' and the monographs tended to deal with mathematics. The interlibrary loan analysis showed this to be an area where acquisitions are needed.

Abken, Peter A. Survey and Analysis of Index Linked Certificates of Deposit. Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-1. 87% found.

Hunter, William C. Examination of Cost Subadditivity... Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-3. 89% found.

Hunter, William C. Demand for Labor at the World's Largest Banking Organizations. Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-6. 89% found.

Miller, Preston J. How Little We Know About Budget Policy Effects. Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-4. 95% found.

Srinivasan, Aruna. Costs of Financial Intermediation Under Regulation. Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-2. 72% found.

Tallman, Ellis W. Macroeconomic Factors and Asset Excess Returns. Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-7. 90% found.

Wall, Larry D. Effect of Continental Illinois' Failure of the Financial... Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-9. 93% found.

Whitt, Joseph A. Nominal Exchange Rates and Unit Roots. Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-8. 79% found.

Zadrozny, Peter A. Analytic Derivatives of the... Atlanta, GA: Federal Reserve Bank, 1989. Working paper 89-5. 22% found.

Material not found in the collection were journals dealing with mathematics or monographs classified in QA. Two out of the three serials cited were found in the library. Of the five monographs, three were classified QA.

THE TOTAL NUMBER OF FEDERAL RESERVE BANK OF ATLANTA CITATIONS FOUND WAS 82%

FEDERAL RESERVE BANK OF MINNEAPOLIS

Abken, Peter. A Survey and Analysis of Index-Linked Certificates of Deposit. Minneapolis, Mn: Institute for Empirical Macroeconomics and the Federal Reserve Bank, 1988. Discussion Paper #1. Found 75%

Aiyagari, Rao S. Output, Employment, and Interest Rate... Minneapolis, Mn: Institute for Empirical Macroeconomics and the Federal Reserve Bank, 1990. Discussion Paper #25. Found 71%

Of references not found, 100% were manuscripts.

Cheung, Yin-Wong. On Maximum-Likelihood Estimation... Minneapolis, Mn: Institute for Empirical Macroeconomics and The Federal Reserve Bank, 1990. Discussion paper #34. Found 33%

Of the ten monographs cited, six were unpublished manuscripts and three were classified as 'QA.'

Christiano, Lawrence. Current Real Business Cycle Theories and Aggregate... Minneapolis, Mn: Institute for Empirical Macroeconomics and the Federal Reserve Bank, 1990. Discussion Paper #24. Found 79%

78 % of the references not found in the library were manuscripts.

Diebold, Francis. International Evidence on Business Cycle Duration... Minneapolis, Mn: Institute for Empirical Macroeconomics and The Federal Reserve Bank, 1990. Discussion paper #31. Found 89%

_____. Real Exchange Rates Under The Gold Standard. Minneapolis, Mn: Institute for Empirical Macroeconomics and The Federal Reserve Bank, 1990. Discussion paper #32. Found 29%

20% of the monographs cited were unpublished.

Greenwood, Jeremy. Allocation of Goods and Time Over the Business Cycle. Minneapolis, Mn: Institute for Empirical Macroeconomics and the Federal Reserve Bank, 1990. Discussion Paper #26. Found 82%

Hayashi, Fumio. Ex-Day Behavior of Japanese Stock Prices. Minneapolis, Mn: Institute for Empirical Macroeconomics and the Federal Reserve Bank, 1988. Discussion Paper #30. Found 79%

Keane, Michael. Sectoral Shift Theories of Unemployment. Minneapolis, Mn: Institute for Empirical Macroeconomics and the Federal Reserve Bank, 1990. Discussion Paper #28. Found 81%

Kydland, Finn E. Role of Money A Business Cycle Model. Minneapolis, Mn: Institute for Empirical Macroeconomics and the Federal Reserve Bank, 1988. Discussion Paper #23. Found 90%

FEDERAL RESERVE BANK OF MINNEAPOLIS TOTAL REFERENCES FOUND: 77%

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

INTERNATIONAL FINANCE DISCUSSION PAPERS.

Gagnon, Joseph E. and Michael M. Knetter. Pricing to Market in International Trade. Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. International Finance Discussion Papers #389. 50% found.

67% of all serial citations were in the library. Two out of the three monographs were unpublished papers.

Ingram, Beth and Eric M. Leeper. Post Econometric Policy Evaluation. Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. International Finance Discussion Papers #393. 66% found.

100 % of the serials cited were found. 32% of the monographs were unpublished papers.

Irwin, Douglas A. Free Trade at Risk? Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. International Finance Discussion Papers #391. 38% found.

86% of all serial citations were in the library. This paper deals with the historical perspectives of free trade with an emphasis on British economic history. This is not a subject that would be expected in a Board of Governors series.

_____. Mercantilism as Strategic Trade Policy. Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. International Finance Discussion Papers #392. 19% found.

67% of the serial citations were in the library. Dealing with an historical analysis of the East India Company. Again there is an emphasis on British economic history.

Rose, Andrew K. Why has Trade grown Faster than Income? Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. International Finance Discussion Papers #390. 36% found.

75% of the serials, or three out of four titles, were in the library collection. The high number of monographs cited, double the number of serials cited, was the reason for the low percentage found.

FINANCE AND ECONOMIC DISCUSSION PAPERS.

Brunner, Alan D. and Gregory D. Hess. Are Higher Levels of Inflation Less Predictable? Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. Finance & Economic Discussion Paper # 141. 67% found.

Gertler, Mark, R. Glenn Hubbard and Anlil K. Kashyap. Interest Rate Spreads, Credit Constraints...Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. Finance & Economic Discussion Paper # 137. 76% found.

Hess, Gregory D. A Test of the Theory of Optimal Taxation for the United States. Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. Finance & Economic Discussion Paper# 143. 92% found.

Kuplec, Paul H. Financial Liberalization and International Trends... Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. Finance & Economic Discussion Paper #131. 80% found.

Sharpe, Steven A. Switching Costs, Market Concentration, and Prices. Washington, D.C.: Board of Governors of the Federal Reserve System, 1990. Finance & Economic Discussion Paper #138. 100% found.

TOTAL FEDERAL RESERVE BOARD CITATIONS FOUND: 77%

All of the publications listed can be acquired, free of charge, from the Publications Divisions of the institutions that published them.

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Wenger, Charles B., Christine B. Sweet and Helen J. Stiles. "Monograph Evaluation for Acquisitions in a Large Research Library." Journal of the American Society for Information Science 30 (March 1979): 88-92.

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